PART Y-2
MATERIAL SAFETY DATA SHEETS AND LABEL PREPARATION

MATERIAL SAFETY DATA SHEETS AND LABEL PREPARATION

WAC 296-307-560 Scope. This chapter sets minimum requirements for content and distribution of material safety data sheets (MSDSs) and labels for hazardous chemicals.

- This chapter applies when you do **one or more** of the following:
  - Import, produce, or repackage chemicals, including manufactured items (such as bricks, welding rods, and sheet metal) that aren't exempt as articles
  - Sell or distribute hazardous chemicals to manufacturers, distributors or employers
  - Choose not to rely on material safety data sheets (MSDSs) provided by the importer, manufacturer or distributor.

Note:

- You aren't required to evaluate chemicals or create MSDSs for chemicals you didn't produce or import. If you decide to evaluate chemicals or create MSDSs, then the requirements of this chapter will apply to you.
- Use Table 2 to determine which sections in this chapter apply to your workplace.

Exemptions:

- All of the following are **always** exempt from this chapter:
  - Ionizing and nonionizing radiation
  - Biological hazards
  - Tobacco and tobacco products.
- The chemicals and items listed in Table 1 are exempt from this chapter **under the conditions specified.**

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Table 1
Conditional Exemptions from this chapter

This chapter does NOT apply to	When
• Alcoholic beverages **OR** • Foods	• Sold, used, or prepared in a retail establishment (such as a grocery store, restaurant, bar, or tavern)
• An article (manufactured item)	• It isn't a fluid or particle **AND** • It is formed to a specific shape or design during manufacture for a particular end use function[1] **AND** • It releases only trace amounts of a hazardous chemical during normal use **AND** doesn't pose a physical or health risk to the employees
• Consumer products – Produced or distributed for sale meeting the definition of consumer products in the Consumer Product Safety Act (see U.S. Code, Title 15, Chapter 47, section 2052[2]) **OR** • Hazardous household products – Meeting the definition of hazardous substances in the Federal Hazardous Substance Act (see U.S. Code, Title 15, Chapter 30, section 1261[2])	• Both criteria apply: – They are used in the workplace for the same purpose as intended by the manufacturer or importer – The duration and frequency of an employee's exposure is no more than the range of exposures that consumers might reasonably experience
• Cosmetics	• Packaged and sold in retail establishments
• Drugs – Meeting the definition for drugs in the Federal Food, Drug, and Cosmetic Act (see U.S. Code, Title 21, Chapter 9, subchapter II, section 321[2])	• In solid, final form (for example, tablets, or pills) for direct administration to the patient **OR** • Packaged and sold in retail establishments (for example, over-the-counter drugs) **OR** • Intended for employee consumption while in the workplace (for example, first-aid supplies)
• Hazardous solid wastes – Meeting the definition of hazardous wastes in the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (see U.S. Code, Title 42, Chapter 82, Subchapter I, section 6903[2])	• Subject to the United States Environmental Protection Agency (EPA) regulations[3]
• Hazardous substances – Released into the environment meeting the definition of hazardous substances in the Comprehensive Environmental Response , Compensation and Liability Act (CERCLA) (see U.S. Code, Title 42, Chapter 103, Subchapter I, section 9601[2])	• They are the focus of remedial or removal action being conducted under CERCLA in accordance with EPA regulations (Title 40 of the Code of Federal Regulations (CFR)[3])
• Hazardous wastes – Meeting the definition of dangerous wastes in the Hazardous Waste Management Act (see chapter 70.105 RCW[4])	• Subject to department of ecology regulations, chapter 173-303 WAC[5], that address the accumulation, handling and management of hazardous waste, and describe all of the following: – Safety – Labeling – Personnel training – And other related requirements
• Solid wood **OR** • Wood products (for example, lumber, and paper)	• All of the following apply: – The material isn't treated with hazardous chemicals – The only hazard is potential flammability or combustibility – The product isn't expected to be processed (for example, by sanding or sawing)

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[1]End use is dependent in whole, or in part, upon maintaining the item's original shape or design. If the item will be significantly altered from its original form, it can no longer be considered a manufactured item.
[2]This federal act is included in the United States Code. See http://www.access.gpo.gov/uscode/uscmain.html.
[3]EPA regulations are included in the Code of Federal Regulations (CFR). See http://www.epa.gov.
[4]This state act is included in the Revised Code of Washington (RCW). The RCW compiles all permanent laws of the state. See http://www.leg.wa.gov/wsladm/default.htm.
[5]See http://www.ecy.wa.gov.

Use Table 2 to find out which sections of this part apply to you. For example, if you import **AND** sell hazardous chemicals **ALL** sections apply. WAC 296-307-56050 applies to all employers covered by the scope of this part.

Table 2
Section Application

If you	Then the sections marked with an X apply			
	56010 - 56015	**56025**	**56030 - 56035**	**56045**
• Import or produce chemicals	X	X		
• Sell or distribute hazardous chemicals to – Manufacturers **OR** – Distributors **OR** – Employers (includes retail or wholesale transactions)			X	X
• Choose to **NOT** rely on MSDSs provided by the importer, manufacturer or distributor	X	X		

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 05-01-166 (Order 04-19), § 296-307-560, filed 12/21/04, effective 04/02/05. Statutory Authority: RCW 49.17.010, .040, .050, and .060. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-560, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56005 Hazard evaluation.

Your responsibility:

To make sure the hazardous chemicals are identified.

You must:

Conduct complete hazard evaluations
WAC 296-307-56010

Provide access to hazard evaluation procedures
WAC 296-307-56015.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56005, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56010 Conduct complete hazard evaluations.

Important:

- Hazard evaluation is a process where hazards of chemicals are identified by reviewing available research or testing information. You aren't required to perform your own laboratory research or testing to meet the requirements of this section
  - Information from hazard evaluations is used to complete material safety data sheets (MSDSs) and labels
  - MSDSs from your suppliers may be used to complete the hazard evaluation for chemicals you produce
  - MSDSs and labels are **NOT** required for chemicals that are determined to be nonhazardous
- Importers and manufacturers are required to develop MSDSs and labels. If you decide to develop your own MSDSs and labels, then this chapter also applies to you.

You must:

(1) Describe in writing your procedures for conducting hazard evaluations.

(2) Conduct a complete hazard evaluation for **ALL** chemicals you produce or import to determine if they are hazardous chemicals.

- Identify and consider available scientific evidence of health and physical hazards
- Evidence that meets the criteria in Table 3 must be used to establish a hazard
- Chemicals identified in a Table 4 source must be regarded as hazardous
- The scope of health hazards considered must include the categories in Tables 5 and 6
- If the chemical is a mixture, follow the additional criteria in Table 7
- If you find evidence that meets the criteria in Table 3, use it in your hazard evaluation.

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Table 3 Criteria for Hazard Evidence	
Hazard	**Criteria**
• Health hazard	• Where available, use human case reports of health effects **AND** • One of more studies that – Are based on human populations, if available, and animal populations [1,2] **AND** – Report statistically significant conclusions of a hazardous effect or health hazard (as defined in this rule) **AND** – Have been conducted following established scientific principles.
• Physical hazard	• Valid evidence that shows a chemical in any one of the following[3]: – A combustible liquid – A compressed gas – Explosive – Flammable – An organic peroxide – An oxidizer – Pyrophoric – Unstable (reactive) – Water-reactive

[1]If human data isn't available, use results of tests done on animals and other available studies to predict health effects on employees (for example, effects resulting from short and long-term exposures to chemicals).
[2]In vitro studies alone don't generally form the basis of a finding of hazard.
[3]These terms are defined in WAC 296-307-56050.

Chemicals identified in the sources listed in Table 4 must be assumed to be hazardous (including carcinogens and potential carcinogens).

Table 4 Information Sources Identifying Hazardous Chemicals
• Sources that address a broad range of hazard categories: – Chapter 296-62 WAC, General Occupational Health Standards, WISHA – 29 CFR Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA) – *Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment*, American Conference of Governmental Industrial Hygienists (ACGIH) (latest edition). • Sources that identify carcinogens or potential carcinogens: – Chapter 296-62 WAC, General Occupational Health Standards, WISHA – 29 CFR Part 1910, Subpart Z, Toxic and Hazardous Substances, Occupational Safety and Health Administration (OSHA) – National Toxicology Program (NTP), Annual Report on Carcinogens (latest edition) – International Agency for Research on Cancer (IARC) Monographs (latest editions). *Note*: The *Registry of Toxic Effects of Chemical Substances* is published by the National Institute for Occupational Safety and Health (NIOSH) and identifies chemicals found to be potential carcinogens by the NTP and IARC.

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Chemicals meeting Table 5 definitions, along with the criteria for established evidence in Table 3, must be regarded as hazardous.

Table 5 is NOT intended to present all hazard categories or test methods. Available scientific data involving other test methods and animal species must also be evaluated to determine a chemical's hazards.

Table 5 **Standard Health Hazard Categories**	
A chemical is considered to be	**If**
• A carcinogen	• The International Agency for Research on Cancer (IARC) considers it to be a carcinogen or potential carcinogen **OR** • The National Toxicity Program (NTP) (latest edition) lists it as a carcinogen or potential carcinogen **OR** • It is regulated by WISHA or OSHA as a carcinogen
• Corrosive	• It causes visible destruction of, or irreversible alterations in, living tissue (not inanimate surfaces) by chemical action at the site of contact Example: - A chemical is corrosive if tested on the intact skin of albino rabbits by a method described by the U.S. Department of Transportation (in Appendix A to 49 CFR Part 173) and it destroys or changes (irreversibly) the structure of the tissue at the contact site after a 4-hour exposure period
• Toxic	• It has a median lethal dose (LD50) greater than 50 milligrams per kilogram, but no more than 500 milligrams per kilogram of body weight, when administered orally to albino rats weighing between 200 -300 grams each **OR** • It has a median lethal dose (LD50) greater than 200 milligrams per kilogram, but not more than 1,000 milligrams per kilogram, of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between 2-3 kilograms each **OR**
	• It has a median lethal concentration (LC50), in air:

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	- Greater than 200 parts per million, but not more than 2,000 parts per million (by volume of gas or vapor) **OR** - Greater than 2 milligrams per liter, but not more than 20 milligrams per liter, of mist, fume, or dust, when administered by continuous inhalation for one hour (or less if death occurs within one hour) to albino rats, weighing between 200-300 grams each
• Highly toxic	• It has a median lethal dose (LD50) of 50 milligrams, or less, per kilogram of body weight when administered orally to albino rats weighing between 200-300 grams each **OR** • It has a median lethal dose (LD50) of 200 milligrams, or less, per kilogram of body weight when administered by continuous contact for 24 hours (or less if death occurs within 24 hours) with the bare skin of albino rabbits weighing between 2-3 kilograms each **OR** • It has a median lethal concentration of (LC50), in air, of: - 200 parts per million (by volume), or less, of gas or vapor **OR** - 2 milligrams per liter, or less, of mist, fume, or dust, when administered by continuous inhalation for one hour (or less if death occurs within one hour) to albino rats weighing between 200-300 grams each
• An irritant	• It is **NOT** corrosive, but causes a reversible inflammatory effect on living tissue by chemical action at the contact site Examples: - The chemical is a skin irritant when tested on the intact skin of albino rabbits (by the methods of 16 CFR 1500.41) for 4 hours exposure (or by other appropriate techniques), and the exposure results in an empirical score of 5 or more - A chemical is an eye irritant if so determined under the procedure listed in 16 CFR 1500.42 or other appropriate techniques
• A sensitizer	• It causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure

Categories provided in Table 6 illustrate the broad range of target organ effects that must be considered when conducting hazard evaluations. Chemicals meeting Table 6 definitions, along with the criteria for established evidence in Table 3, must be regarded as hazardous.

Examples provided in Table 6 are **NOT** intended to be a complete list.

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Table 6
Examples of Target Organ Effect Categories Category

Category	Definition	Examples of signs and symptoms	Examples of Chemicals
Hepatotoxins	Cause liver damage	• Jaundice • Liver enlargement	• Carbon tetrachloride • Nitrosamines
Nephrotoxins	Cause kidney damage	• Edema • Proteinuria	• Halogenated hydrocarbons • Cadmium
Neurotoxins	Cause primary toxic effects on the nervous system	• Narcosis • Behavioral changes • Decrease in motor functions	• Mercury • Carbon disulfide • Lead
Chemicals that act on the • Blood **OR** • Hematopoietic (blood forming) system	• Decrease hemoglobin function **OR** • Deprive the body tissues of oxygen	• Cyanosis • Loss of consciousness	• Carbon monoxide • Cyanides • Benzene
Chemicals that damage the lungs	• Irritate lungs **OR** • Damage pulmonary tissue	• Cough • Tightness in chest • Shortness of breath	• Silica • Asbestos
Reproductive toxins	Affect reproductive capabilities, including: • Chromosomal damage (mutation) • Effects on fetuses (teratogenesis)	• Birth defects • Sterility	• Lead • 1,2-Dibromo-3-chloropropane (DBCP) • Nitrous oxide
Cutaneous (skin) hazards	Affect the dermal layer of the body	• Defatting of the skin • Rashes • Irritation	• Ketones • Chlorinated compounds
Eye hazards	Affect the eye or ability to see	• Conjunctivitis • Corneal damage	• Organic solvents • Acids

Table 7
Criteria for Evaluating Chemical Mixtures

If a mixture	Then
• Has been thoroughly tested as a whole for a physical or health hazard	• You must use those results
• Has **NOT** been tested as a whole for a health hazard	• You must: – Evaluate **EACH** ingredient in the mixture to determine the hazards – Consider the mixture to have the same hazards as each ingredient determined to be hazardous
• Has **NOT** been tested as a whole for physical hazards	• You must: – Use any scientifically valid data available to evaluate the potential physical hazards of the mixture

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56010, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56015 Provide access to hazard evaluation procedures.

You must:

- Provide access to your written hazard evaluation procedures when requested by any of the following:

  – Employees
  – Designated representatives of employees
  – Representatives of the Department of Labor and Industries
  – Representatives of the National Institute for Occupational Safety and Health (NIOSH).

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56015, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56020 Material safety data sheets.

Your responsibility:

To provide complete and accurate material safety data sheets (MSDSs).

You must:

Develop or obtain MSDSs
WAC 296-307-56025

Provide MSDSs
WAC 296-307-56030

Follow-up if an MSDS isn't provided
WAC 296-307-56035.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56020, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56025 Develop or obtain material safety data sheets (MSDSs).

You must:

- Develop or obtain a complete and accurate material safety data sheet (MSDS) for each hazardous chemical or mixture according to **ALL** of the following:

  – **ALL** information in Table 8 must be completed. If there is no relevant information for a required item, this must be noted. Blank spaces aren't permitted.

Note:

- No specific format is required for MSDSs; however, an example format (OSHA form 174) can be found online at: http://www.osha.gov
- One MSDS can be developed for a group of complex mixtures (for example, jet fuels or crude oil) **IF** the health and physical hazards of the mixtures are similar (the amounts of chemicals in the mixture may vary).

  – Content of MSDSs must accurately represent the available scientific evidence.

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Note: You may report results of scientifically valid studies that tend to refute findings of hazards.

– MSDSs must be in English.

Note: You may develop copies of MSDSs in other languages.

You must:

- Revise an MSDS when you become aware of new and significant information regarding the hazards of a chemical, or how to protect against the hazards

  – Within 3 months after you first become aware of the information
  OR
  – Before the chemical is reintroduced into the workplace if the chemical is no longer being used, produced or imported.

Table 8 **Information Required on MSDSs**
• The chemical's identity as it appears on the label
• The date the MSDS was prepared or updated
• A contact for additional information about the hazardous chemical and appropriate emergency procedures Include the following – Name – Address – Telephone number of the responsible party preparing or distributing the MSDS
• The chemical's hazardous ingredients[1] as determined by your hazard evaluation – For a **single substance chemical**, include the chemical and common name(s) of the substance – For **mixtures** tested as a whole ♦ Include the common name(s) of the mixture **AND** ♦ List the chemical and common name(s) of ingredients that contribute to the known hazards – For mixtures NOT tested as a whole, list the chemical and common name(s) of hazardous ingredients ♦ That make up 1% or more of the mixture, by weight or volume, including carcinogens (if 0.1% concentration or more, by weight or volume) – If ingredients are less than the above concentrations but may present a health risk to employees (for example, allergic reaction or exposure could exceed the permissible exposure limits, or PEL) they must be listed here.
• Exposure limits for airborne concentrations. Include **ALL** of the following, when they exist: – WISHA or OSHA PELs[2] ♦ The 8-hour time weighted average (TWA) ♦ The short-term exposure limit (STEL), if available ♦ Ceiling values, if available – Threshold limit values (TLVs) including 8-hour TWAs, STELs, and ceiling values – Other exposure limits used or recommended by the employer preparing the MSDS
• Physical and chemical characteristics – For example, boiling point, vapor pressure, and odor

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- Fire, explosion data, and related information
  - For example, flashpoint, flammable and explosion limits, extinguishing media, and unusual fire or explosion hazards

- Physical hazards of the chemical including reactivity information
  - For example, incompatibilities, decomposition products, by-products, and conditions to avoid

- Health hazard information including **ALL** of the following:
  - Primary routes of exposure
- For example, inhalation, ingestion, and skin absorption or other contact[3]
  - Health effects (or hazards) associated with:
    - Short-term exposure[4]
      AND
    - Long-term exposure[4]
  - Whether the chemical is listed or described as a carcinogen or potential carcinogen in the latest editions of each of the following:
    - The National Toxicology Program (NTP) Annual Report on Carcinogens
      OR
    - The International Agency for Research on Cancer (IARC) Monographs as a potential carcinogen
      OR
    - WISHA or OSHA rules
  - Signs and symptoms of expsoure[3]
  - Medical conditions generally recognized as being aggravated by exposure

- Emergency and first-aid procedures

- Generally applicable precautions for safe handling and use known to the employer preparing the MSDS
  - For example, appropriate procedures for clean-up of spills and leaks, waste disposal method, precautions during handling and storing

- Generally applicable and appropriate control measures known to the employer preparing the MSDS, including **ALL** of the following
  - Engineering control (for example, general or local exhaust ventilation)
  - Work practices
  - Personal protective equipment (PPE)
  - Personal hygiene practices
  - Protective measures during repair and maintenance of contaminated equipment

[1]The identities of some chemicals may be protected as trade secret information (see chapter 296-62 WAC, Part B-1, Trade Secrets).

[2]WISHA PEL categories are defined, and values are provided, in chapter 296-307 WAC, Part Y-6.

[3]A skin notation listed with either an ACGIH TLV or WISHA/OSHA PEL indicates that skin absorption is a primary route of exposure.

[4]Examples of:

- Short-term health effects (or hazards) include eye irritation, skin damage caused by contact with corrosives, narcosis, sensitization, and lethal dose.
- Long-term health effects (or hazards) include cancer, liver degeneration, and silicosis.

[5]Signs and symptoms of exposure to hazardous substances include those that:

- Can be measured such as decreased pulmonary function
  AND
- Are subjective such as feeling short of breath.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 05-01-166 (Order 04-19), § 296-307-560225, filed 12/21/04, effective 04/02/05. Statutory Authority: RCW 49.17.010, .040, .050, and .060. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56025, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56030 Provide MSDSs for products shipped, transferred or sold over-the-counter.

You must:

- Provide the correct MSDS to manufacturers, distributors and employers:
  - With the initial shipment or transfer of the product
    AND
  - With the first shipment or transfer after an MSDS is updated
    AND
  - Whenever one is requested.

Note:

- MSDSs may be provided separately from containers as long as they are provided before or at the same time as the containers. For example, you may fax, or e-mail the MSDS
- You are **NOT** required to provide MSDSs to retailers who inform you they
  - Don't sell the product to commercial accounts
    AND
  - Don't open the sealed product containers for use in their workplace.

You must:

Follow the requirements in Table 9 for chemicals sold over-the-counter.

Table 9
Requirements for Chemicals Sold Over the Counter (NOT shipped)

If you are a	Then
• Retail distributor **with** commercial accounts	• Provide an MSDS to employers with commercial accounts when requested **AND** • Post a sign, or otherwise inform employers, that MSDSs are available
• Retail distributor **without** commercial accounts	• Provide the employer, when requested, with **ALL** of the following: – Name – Address – Telephone number of the chemical manufacturer, importer, or distributor who can provide an MSDS
• Wholesale distributor selling products over-the counter to employers	• Provide an MSDS to employers with commercial accounts when requested **AND** • Post a sign, or otherwise inform employers, that MSDSs are available

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56030, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56035 Follow-up if an MSDS isn't provided.

You must:

- Obtain an MSDS from the chemical manufacturer, distributor or importer as soon as possible, if an MSDS isn't provided for a shipment labeled as a hazardous chemical.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56035, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56040 Labeling.

Your responsibility:

To provide employers with containers of hazardous chemicals that are properly labeled.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56040, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56045 Label containers of hazardous chemicals.

Exemption: Containers are exempt from this section if **ALL** hazardous contents are listed in Table 11.

You must:

- Make sure every container of hazardous chemicals leaving the workplace is properly labeled. This includes **ALL** of the following:
  - The identity of the hazardous chemical (the chemical or common name) that matches the identity used on the MSDS
  - An appropriate hazard warning
  - The name and address of the chemical manufacturer, importer, or other responsible party
  - Make sure labeling doesn't conflict with the requirements of:
    - The Hazardous Materials Transportation Act (49 U.S.C. 1801 et seq.)
      AND
    - Regulations issued under the act by the U.S. Department of Transportation (Title 49 of the Code of Federal Regulations, Parts 171 through 180). See http://www.dot.gov
  - Revise labels within 3 months of becoming aware of new and significant information about chemical hazards
  - Provide revised labels on containers beginning with the first shipment after a revision, to manufacturers, distributors or employers
  - Revise the label when a chemical isn't currently used, produced or imported, before:
    - You resume shipping (or transferring) the chemical
      OR
    - The chemical is reintroduced in the workplace
  - Label information
    - Clearly written in English
      AND
    - Prominently displayed on the container.

Reference: Additional labeling requirements for specific hazardous chemicals (for example, asbestos and cadmium are found in chapter 296-62 WAC, General Occupational Health Standards (see parts F, G, and I-1 of that chapter).

Note: When the conditions specified in Table 10 are met for the solid material products listed, you aren't required to provide labels for every shipment.

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Table 10 Labeling for Solid Materials	
You need only send labels with the first shipment, IF the product is	**And**
Whole grain	• It is shipped to the same customer **AND** • No hazardous chemicals are part of or known to be present with the product which could expose employees during handling - For example, cutting fluids on solid metal, and pesticides with grain
Solid untreated wood	
Solid metal For example: Steel beams, metal castings	
Plastic items	

Exemptions: The chemicals (and items) listed in Table 11 are **EXEMPT** from **THIS SECTION** under the conditions specified. Requirements in other sections still apply.

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Table 11
Conditional Label Exemptions

This section does not apply to	When the product is
• Pesticides – Meeting the definition of pesticides in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) see Title 7, U.S.C. Chapter 6, Subchapter II, Section 136[1])	• Subject to: – Labeling requirements of FIFRA[1] **AND** – Labeling regulations issued under FIFRA by the United States Environmental Protection Agency (EPA) (see Title 40 of the Code of Federal Regulations[2])
• A chemical substance or mixture – Meeting the definition of chemical substance or mixture in the Toxic Substance Control Act (TSCA) (see Title 15 U.S.C. Chapter 53, Subchapter II, Section 2602[1])	• Subject to – Labeling requirements of TSCA[1] **AND** – Labeling requirements issued under TSCA by the EPA (see Title 40 of the Code of Federal Regulations[2])
• Each of the following – Food – Food additives – Color additives – Drugs – Cosmetics – Medical devices or products – Veterinary devices or products – Materials intended for use in these products (for example: Flavors, and fragrances) • As defined in – The Federal Food, Drug, and Cosmetic Act (see Title 21 U.S.C. Chapter 9, Subchapter II, (Section 321[1]) **OR** – The Virus-Serum Act of 1913 (see Title 21 U.S.C. Chapter 5, Section 151 et seq.[1]) **OR** – Regulations issued under these acts (see Title 21 Part 101 in the Code of Federal Regulations, and Title 9, in the Code of Federal Regulations[3])	• Subject to: – Labeling requirements in Federal Food,. Drug, and Cosmetic Act, Virus-Serum Toxin Act of 1913, and issued regulations enforced by the United States Food and Drug Administration (see Title 21 Parts 101-180 in the Code of Federal Regulations[3]) **OR** – Department of Agriculture (see Title 9, in the Code of Federal Regulations[3])
• Each of the following: – Distilled spirits (beverage alcohols) **AND** – Wine **AND** – Malt beverage • As defined in – The Federal Alcohol Administration Act (see Title 27 U.S.C. Section 201[1]) **AND** – Regulations issued under this act (see Title 27 in the Code of Federal Regulations[3])	• Subject to: – Labeling requirements of Federal Alcohol Administration Act[1] **AND** – Labeling regulations issued under Federal Alcohol Administration Act by the Bureau of Alcohol, Tobacco, and Firearms (see Title 27 in the Code of Federal Regulations[3])

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• Consumer products **AND** • Hazardous substances - As defined in the Consumer Product Safety Act (see 15 U.S.C. 2051 et seq.[1]) **AND** - The Federal Hazardous Substances Act (see 15 U.S.C. 1261 et. seq.[1])	• Subject to: – A consumer product safety or labeling requirement of the Consumer Product Safety Act or Federal Hazardous Substance Act[1] **OR** – Regulations issued under these acts by the Consumer Product Safety Commission (see Title 16 in the Code of Federal Regulations[3])
• Agricultural seed **AND** • Vegetable seed treated with pesticides	• Labeled as required by – The Federal Seed Act (see Title 7 U.S.C. Chapter 37, Section 1551 et. seq.[1]) **AND** – Labeling requirements issued under Federal Seed Act by the United States Department of Agriculture[1]

[1]This federal act is included in the United States Code. See http://www.access.gpo.gov/uscode/uscmain.html.
[2]See http://www.epa.gov.
[3]See http://www.access.gpo.gov/nara/cfr/index.html.

[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 06-08-087 (Order 05-12), § 296-307-56045, filed 04/04/06, effective 09/01/06. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56045, filed 05/06/03, effective 08/01/03.]

WAC 296-307-56050 Definitions. The following definitions apply to this chapter:

Article (manufactured item)

A manufactured item that

- Isn't a fluid or particle
  AND
- Is formed to a specific shape or design during manufacture for a particular end use function
  AND
- Releases only trace amounts of a hazardous chemical during normal use and doesn't pose a physical or health risk to employees.

Chemical

- An element or mixture of elements
  OR
- A compound or mixture of compounds
  OR
- A mixture of elements and compounds

Included are manufactured items (such as bricks, welding rods and sheet metal) that aren't exempt as an article.

Chemical name

- The scientific designation of a chemical developed by the
  - International union of pure and applied chemistry (IUPAC)
    OR
  - Chemical abstracts service (CAS) rules of nomenclature
    OR
- A name that clearly identifies the chemical for the purpose of conducting a hazard evaluation.

Combustible liquid
Liquids with a flashpoint of at least 100°F (37.8°C) and below 200°F (93.3°C). A mixture with at least 99% of its components having flashpoints of 200°F (93.3°C), or higher, isn't considered a combustible liquid.

Commercial account

An arrangement where a retailer is selling hazardous chemicals to an employer

- Generally in large quantities over time
  OR
- At costs below regular retail price.

Common name

Any designation or identification used to identify a chemical other than the chemical name, such as a

- Code name or number
  OR
- Trade or brand name

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OR

- Generic name.

Compressed gas

- A contained gas or mixture of gases with an absolute pressure greater than:
  - 40 psi at 70°F (21.1°C)
    OR
  - 104 psi at 130°F (54.4°C) regardless of the pressure at 70°F (21.1°C)
    OR
- A liquid with a vapor pressure greater than 40 psi at 100°F (37.8°C), as determined by ASTM D323-72.

Container

A vessel, other than a pipe or piping system, that holds a hazardous chemical. Examples include:

- Bags
- Barrels
- Bottles
- Boxes
- Cans
- Cylinders
- Drums
- Reaction vessels
- Storage tanks
- Rail cars.

Designated representative

- An individual or organization with written authorization from an employee
  OR
- A recognized or certified collective bargaining agent (not necessarily authorized by an employee)
  OR
- A legal representative of a deceased or legally incapacitated employee.

Distributor
A business that supplies hazardous chemicals to other employers. Included are employers who conduct retail and wholesale transactions.

Explosive
A chemical that causes a sudden, almost instant release of pressure, gas, and heat when exposed to a sudden shock, pressure, or high temperature.

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Flammable

A chemical in one of the following categories:

- Aerosols that, when tested using a method described in 16 CFR 1500.45, yield either a:
  - Flame projection of more than 18 inches at full valve opening
    OR
  - A flashback (a flame extending back to the valve) at any degree of valve opening
- Gases that, at the temperature and pressure of the surrounding area, form a:
  - Flammable mixture with air at a concentration of 13 %, by volume, or less
    OR
  - Range of flammable mixtures with air wider than 12 %, by volume, regardless of the lower limit
- Liquids with a flashpoint below 100°F (37.8°C). A mixture with at least 99 % of its components having flashpoints of 100°F (37.8°C), or higher, isn't considered a flammable liquid
- Solids, other than blasting agents or explosives, as defined in WAC 296-52-417 or 29 CFR 1910.109(a), that:
  - Is likely to cause fire through friction, moisture, absorption, spontaneous chemical change or retained heat from manufacturing or processing
    OR
  - That can be readily ignited (and when ignited burns so vigorously and persistently that it creates a serious hazard)
    OR
  - When tested by the method described in 16 CFR 1500.44, ignite and burn with a self-sustained flame at a rate greater than 1/10th of an inch per second along its major axis.

Flashpoint

The minimum temperature at which a liquid gives off an ignitable concentration of vapor, when tested by any of the following measurement methods:

- Tagliabue closed tester. Use this for liquids with a viscosity less than 45 Saybolt Universal Seconds (SUS) at 100°F (37.8°C), that don't contain suspended solids and don't tend to form a surface film under test. See American National Standard Method of Test for Flashpoint by Tag Closed Tester, Z11.24-1979 (ASTM D 56-79)
- Pensky-Martens closed tester. Use this for liquids with a viscosity equal to, or greater than, 45 SUS at 100°F (37.8°C) or for liquids that contain suspended solids or have a tendency to form a surface film under test. See American National Standard Method of Test for Flashpoint by Pensky-Martens Closed Tester, Z11.7-1979 (ASTM D 93-79)
- Setaflash closed tester. See American National Standard Method of Test for Flashpoint by Setaflash Closed Tester (ASTM D 3278-78)

Organic peroxides, which undergo auto accelerating thermal decomposition, are excluded from any of the flashpoint measurement methods specified above.

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Hazardous chemical
A chemical, which is a physical or health hazard.

Hazard warning
Words, pictures or symbols (alone or in combination) that appear on labels (or other forms of warning such as placards or tags) that communicate specific physical and health hazards (including target organ effects) associated with chemicals in a container.

Health hazard

A chemical that may cause health effects in short or long-term exposed employees based on statistically significant evidence from a single study conducted by using established scientific principles.

Health hazards include, but aren't limited to, any of the following:

- Carcinogens
- Toxic or highly toxic substances
- Reproductive toxins
- Irritants
- Corrosives
- Sensitizers
- Hepatotoxins (liver toxins)
- Nephrotoxins (kidney toxins)
- Neurotoxins (nervous system toxins)
- Substances that act on the hematopoietic system (blood or blood forming system)
- Substances that can damage the lungs, skin, eyes, or mucous membranes.

Identity
A chemical or common name listed on the material safety data sheet (MSDS) and label.

Importer
The first business, within the Customs Territory of the United States, that receives hazardous chemicals produced in other countries and supplies them to manufacturers, distributors or employers within the United States.

Label
Written, printed, or graphic material displayed on, or attached to, a container of hazardous chemicals.

Manufacturer
An employer with a workplace where one or more chemicals (including items not exempt as "articles", see Table 1 in this part) are produced for use or distribution.

Material safety data sheet (MSDS)
Written, printed or electronic information (on paper, microfiche, or on-screen) that informs manufacturers, distributors or employers about the chemical, its hazards and protective measures as required by this rule.

Mixture
A combination of 2 or more chemicals that retain their chemical identify after being combined.

Organic peroxide
An organic compound containing the bivalent-O-O- structure. It may be considered a structural derivative of hydrogen peroxide if one or both of the hydrogen atoms has been replaced by an organic radical.

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Oxidizer
A chemical, other than a blasting agent or explosive as defined in WAC 296-52-417 or 29 CFR 1910.109(a), that starts or promotes combustion in other materials, causing fire either of itself or through the release of oxygen or other gases.

Permissible exposure limits
See WAC 296-307-628, for definition of this term.

Physical hazards

A chemical that has scientifically valid evidence to show it is one of the following:

- A combustible liquid
- A compressed gas
- Explosive
- Flammable
- An organic peroxide
- An oxidizer
- Pyrophoric
- Unstable (reactive)
- Water-reactive.

Produce

To do one or more of the following:

- Manufacture
- Process
- Formulate
- Blend
- Extract
- Generate
- Emit
- Repackage.

Pyrophoric
Chemicals that ignite spontaneously in the air at a temperature of 130°F (54.4°C) or below.

Responsible party
Someone who can provide more information about the hazardous chemical and appropriate emergency procedures.

Retailer
See distributor.

Threshold limit values (TLVs)

Airborne concentrations of substances established by the American Conference of Governmental Industrial Hygienists (ACGIH), and represent conditions under which it is believed that nearly all workers may be repeatedly exposed day after day without adverse health effects.

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TLVs are specified in the most recent edition of the *Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices* and include the following categories:

- Threshold limit value-time-weighted average (TLV-TWA)
- Threshold limit value-short-term exposure limit (TLV-STEL)
- Threshold limit value-ceiling (TLV-C).

Unstable (reactive)
A chemical in its pure state, or as produced or transported, that will vigorously polymerize, decompose, condense, or become self-reactive under conditions of shocks, pressure or temperature.

Use

To do one or more of the following:

- Package
- Handle
- React
- Emit
- Extract
- Generate as a by-product
- Transfer.

Water-reactive
A chemical that reacts with water to release a gas that is either flammable or presents a heath hazard.

Wholesaler
See distributor.
[Statutory Authority: RCW 49.17.010, .040, .050, and .060. 05-01-166 (Order 04-19), § 296-307-56050, filed 12/21/04, effective 04/02/05. Statutory Authority: RCW 49.17.010, .040, .050, and .060. 03-10-068 (Order 03-05), § 296-307-56050, filed 05/06/03, effective 08/01/03.]

Resource Section
Material Safety Data Sheets and Label Preparation

Information Resources for Evaluating Chemical Hazards for Material Safety Data Sheets (MSDS) and Label Development

When evaluating chemical hazards that you import or produce, many resources are available to help you.

You may use information in your own company files, such as:

- Testing results
- Illness records of company employees
- Information provided by chemical suppliers

You may also use any or all of the following publications. When using publications, check to make sure you have the latest edition.

Publications

Casarett and Doull's Toxicology; The Basic Science of Poisons, Doull, Klaassen, and Amdur, Macmillan Publishing Co., Inc., New York, NY

Chemical Hazards of the Workplace, Hughes, James P. and Proctor, Nick H., J.P. Lipincott Company, 6 Winchester Terrace, New York, NY 10022

Clinical Toxicology of Commercial Products, Gleason, Gosselin, and Hodge, Williams & Wilkins, Baltimore, MD

Condensed Chemical Dictionary, Van Nostrand Reinhold Co., 135 West 50th Street, New York, NY 10020

General Industry Standards, OSHA, 29 CFR Part 1910

General Occupational Health Standards, WISHA, Chapter 296-62 WAC

Handbook of Chemistry and Physics, Chemical Rubber Company, 18901Cranwood Parkway, Cleveland, OH 44128

IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Man, International Agency for Research on Cancer, 49 Sheridan Street, Albany, New York 12210

Industrial Hygiene and Toxicology, Patty, F.A., John Wiley & Sons, Inc., New York, NY

(publications continued)

Industrial Toxicology, Hamilton, Alice and Hardy, Harriet L., Publishing Sciences Group, Inc., Acton, MA

The Merck Index: An Encyclopedia of Chemicals and Drugs, Merck and Company, Inc., 126 E. Lincoln Avenue, Rahway, NJ 07065

National Toxicology Program (NTP) Annual Report on Carcinogens, National Technical Information Service, 5285 Port Royal Rd., Springfield, VA 22101

Recognition of Health Hazards in Industry, Burgess, William A., John Wiley and Sons, 605 Third Avenue, New York, NY 10158

Threshold Limit Values for Chemical Substances and Physical Agents in the Work Environment and
Biological Exposure Indices with Intended Change, American Conference of Governmental Industrial Hygienists, 6500 Glenway Avenue, Bldg. D-5, Cincinnati, OH 45211

Toxicology of the Eye, Grant, W. Morton, Charles C. Thomas, 301-327 East Lawrence Avenue, Springfield, IL

NIOSH Web Publications

NIOSH has many publications that can be viewed by visiting their website at www.cdc.gov/niosh.
You may also request publications from the NIOSH information service by calling, 1-800-35-NIOSH.

Many of these publications are free and available for downloading. Others may not be free of charge, and must be mailed to you.
NIOSH publication categories include:

- Criteria Documents
- Current Intelligence Bulletins
- Occupational Hazard Assessments
- Special Hazard Reviews

NIOSH specific publications include:

- NIOSH Pocket Guide to Chemical Hazards (NIOSH Pub. No.2001-145)
- Occupational Safety and Health Guidelines for Chemical Hazards (NIOSH Pub. No. 81-123, No. 88-118, No. 89-104, No. 92-110, and No. 95-121)
- Registry of Toxic Effects of Chemical Substances (DHHS (NIOSH) Pub. No. 97-119)

Bibliographic Database Services

Several bibliographic database services are available if you need to search and compile scientific literature on a specific chemical. Some services are free, and some charge for copying documents. These services, such as NIOSHTIC, collect up-to-date articles from various scientific journals and other publications. Contact your local library for assistance.